

PATENT**Docket No. 17804**

We claim:

1. A method for RF grounding glass mounted antennas to metal automotive frames comprising the steps of:

1- providing an RF grounding path on said glass from the antenna mounting location to an edge of said glass located proximate to said metal frame, wherein said path is provided prior to installation of said glass into said metal automotive frame;

2- providing a first RF grounding contact from said antenna to said RF path;

3- providing a second RF grounding contact of said RF path to said metal frame upon installation of said glass in said metal frame.

2. A method as set forth in claim 1, wherein step 3 comprises attaching said glass to said metal frame using a windshield installation adhesive.

3. A method as set forth in claim 2, wherein said adhesive is a carbon loaded urethane.

4. A method as set forth in claim 3, wherein said adhesive is Essex U-400HV.

5. A method as set forth in claim 1, further comprising the step of:

4- mounting said antenna to said glass prior to installation of said glass into said metal frame.

6. A method as set forth in claim 1, wherein said glass comprises a front windshield.

PATENT**Docket No. 17804**

7. A method as set forth in claim 1, wherein step 2 comprises disposing a conductive gasket between said antenna and said RF path.

8. A method as set forth in claim 1, wherein said RF path comprises a conductive epoxy fret applied to said glass.

5 9. A method as set forth in claim 8, wherein said conductive epoxy is silver loaded.

10. A method as set forth in claim 1, further comprising the step of:

5- mounting said antenna to said glass such that a contact area is coupled to said RF path.

10 11. A method as set forth in claim 10, wherein said coupling is accomplished using a conductive gasket.

12. A method as set forth in claim 1, wherein said antenna comprises at least a GPS patch antenna.

13. A system for providing RF grounding from an antenna unit mounted on a glass surface to the metal frame of a vehicle, comprising:

15 an antenna unit having at least one antenna within a casing, said casing having a contact area electrically coupled to said at least one antenna residing within said antenna unit;
a conductive path residing on said glass surface, said conductive path coupled with said metal frame to provide an RF contact;

PATENT**Docket No. 17804**

a conductive gasket, said gasket electrically coupling said contact area of said antenna casing to said conductive path.

14. A system as set forth in claim 13, wherein said coupling between said conductive path and said metal frame is achieve via capacitive coupling through an adhesive, said adhesive
5 securing said glass in said metal frame.

15. A system as set forth in claim 13, wherein said glass comprises a front windshield of a vehicle.

16. A system as set forth in claim 13, wherein said conductive gasket comprises a conductively loaded silicon.

10 17. A system as set forth in claim 13, wherein said at least one antenna comprises a patch antenna.

18. A system as set forth in claim 13, wherein said conductive path residing on said glass surface comprises silver loaded epoxy.

15 19. A system as set forth in claim 14, wherein said adhesive comprises a carbon loaded urethane.

20. A system as set forth in claim 14, wherein said adhesive comprises Essex U-400HV .